Recombinant ARP3 protein (His tag)

Catalog Number	537879
Synonyms	Actin-like protein 3
Species	Human
Expression System	E. coli
Accession	P61158
Molecular Weight	Predictes a molecular mass of 48.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	2-418
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2-418 aa (P61158) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Actin-related protein 3 (ACTR3) fragment (residues 2-418) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment represents a stable, functional unit of ACTR3, enabling detailed investigation of its role in actin polymerization and cytoskeletal dynamics. Actin-related protein 3 (ACTR3) is an ATP-binding component of the Arp2/3 complex, a key regulator of actin polymerization. This complex mediates the formation of branched actin networks essential for cell motility, lamellipodia formation in podocytes, and ciliogenesis. Beyond its cytoplasmic role, ACTR3 contributes to nuclear actin polymerization, influencing gene transcription and DNA repair mechanisms such as homologous recombination. The protein localizes to the cytoplasm, cytoskeleton, cell projections, and nucleus, highlighting its diverse functional repertoire in cellular architecture and genomic stability.